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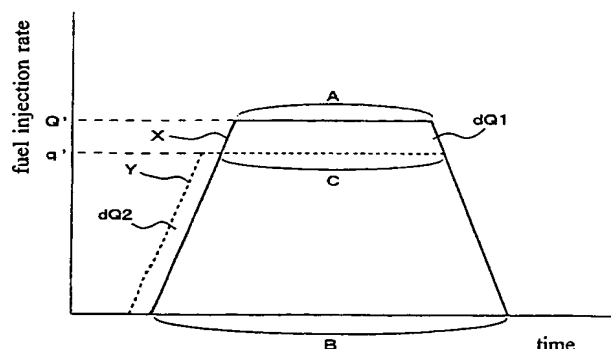
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(54) Title: FUEL INJECTION CONTROL APPARATUS FOR INTERNAL COMBUSTION ENGINE



(57) Abstract: In controlling power supply time, a variation in the fuel injection quantity caused by a variation in the fuel injection rate at the in-cylinder pressure of the engine (detected or estimated value in the running state of the internal combustion engine) relative to the fuel injection rate at a reference in-cylinder pressure (under the condition of an injector characteristic measuring benchmark test), and in addition, a variation in the fuel injection start time is corrected. In the calculation of the variation in the fuel injection quantity, a fuel injection rate changing behavior model in which changing behavior of the fuel injection rate is modeled as a trapezoid is used to calculate the areas of Δq_1 and Δq_2 . The variation in the fuel injection start time Δt_d is calculated based on the rail pressure and the variation in the in-cylinder pressure. In this way, there is provided a technology for controlling the fuel injection quantity that changes with a change in the in-cylinder pressure with improved accuracy.